



ecology and environment, inc.

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International Specialists in the Environment

MEMORANDUM

219383

TO: \ Roy Crossland, EPA/DPO

FROM: Joe Davis, E & E/TATM CB for

THRU: Joe Chandler, E & E/TATL gcc

DATE: September 9, 1994

SUBJECT: Site Assessment: Trans-Con Trucking Dioxin Site, St. Louis, Missouri
PAN#: EMO0478SAA
TDD#: T07-9405-0024
EPA/OSC: Mark Thomas

INTRODUCTION

The Ecology & Environment, Inc. (E & E), Technical Assistance Team (TAT) was tasked by the U.S. Environmental Protection Agency (EPA), Emergency Planning and Response (EP&R) Branch to assist in sampling activities at the Trans-Con Trucking Terminal site at 5701 Hall Street, St. Louis, Missouri, to determine if dioxin was present on site. Specific elements of the task included conducting a site reconnaissance, providing site documentation, collecting environmental media samples as required, and submitting those samples to the contract lab for 2,3,7,8-tetrachlorodibenzo-p-dioxin (dioxin) analysis. Joe Davis was assigned as TAT Project Manager.

BACKGROUND

The Trans-Con lot is 5.85 acres and has surfaces of both thin asphalt over gravel, and areas of hard packed gravel. Interviews conducted by EPA with employees of Bliss Waste Oil Service indicated that this site may have been oiled by the Bliss Waste Oil Service sometime in the early 1970's, however no records are available to verify this. The Trans-Con Site has been sampled in the past by both EPA and the Missouri Department of Natural Resources. Both agencies have reported dioxin on site in their preliminary investigations. The Trans-Con site is located north and adjacent to the Jones Trucking facility which was previously sampled for dioxin by TAT in April, 1994. A site location map is included as ATTACHMENT A.



S00207282
SUPERFUND RECORDS

ON SITE ACTIVITIES

The EPA On Scene Coordinator (OSC) Mark Thomas requested TAT to assist in the sampling effort at the Trans-Con site. On June 1, 1994 TAT members Joe Davis, Dave Kinroth, Joe Parish, and Ed Martin mobilized the necessary equipment and met OSCs Mark Thomas and Carl Bailey on-site at approximately 0745 hours. The OSCs were to perform the boring operation and collect split spoon samples utilizing the EPA Acker drill rig. TAT was assigned to process the samples and manage all necessary documentation for sample shipment and retrieval of analytical results. Samples were to be taken from 24 points equally spaced along the southern edge of the Trans-Con site, where it borders the Jones Trucking site. These points were selected because they are contiguous with the grid points used during the sampling of the Jones Trucking site. An additional ten samples were to be collected from locations previously sampled by the Missouri Department of Natural Resources. All sample locations are indicated on the attached site sketch map. (ATTACHMENT B).

Samples were collected at the aforementioned locations by boring through the asphalt cap with a six inch auger and then driving a 24 inch stainless steel split spoon core sampler with a slide hammer operated from the drill rig to a depth of either 12 inches or 24 inches into the soil. Each 12 inch or 24 inch soil core was divided into samples consisting of six inch increments; 0 to 6 inches, 6 to 12 inches, 12 to 18 inches, and from 18 to 24 inches. A total of 74 samples were collected from the 34 bore hole locations. Three of the bore holes (10, 23, and 29) were randomly selected to be sampled down to 24 inches.

Each sample was placed in a Whirl-pak bag, labeled, placed in an outer poultry bag, and stored in a lined cooler. Duplicates were taken of all samples at the request of the potential responsible party (PRP). The 74 samples along with a PE audit sample and a blank were shipped by courier to the contract lab, American Technical & Analytical Services, Inc. (ATAS), St. Louis, Missouri, for dioxin analysis in two sample shipments on June 2, and June 3, 1994.

RESULTS

The analytical results were received by TAT on June 6 & 7, 1994. The lab reported detectable levels of dioxin in 13 of the 74 samples. Six of the samples indicated concentrations of dioxin greater than 1 ng/gm (or ppb). The sample results (detectable levels only) are presented in the table below.

TABLE 1
SAMPLE SUMMARY TABLE FOR ACTIVITY XT190
TRANS-CON TRUCKING

CORE/SAMPLE		DEPTH	ng/gn (ppb)
001/001	long south fence, about 50 ft. from road	0-6"	0.37
003/005	south fence, 56ft. west of core 001	0-6"	0.68
005/009	south fence, 56ft. west of core 003	0-6"	1.33
007/013	south fence, 56 ft. west of core 005	0-6"	0.46
009/017	south fence, 56 ft. west of core 007	0-6"	0.34
010/020	south fence, 28 ft. west of core 009	6-12"	1.3
025/053	along west fence, about 80 ft. from northwest corner	0-6"	0.90

025/054	" " "	6-12"	2.23
026/055	along west fence, about 26 ft. from northwest corner	0-6"	1.08
030/065	28 ft. east of core 001 and 22 ft. west of road	0-6"	15.00
030/066	" " "	6-12"	0.47
A/067	30 ft. north of, and between cores 001 and 030	0-6"	1.29
A/068	" " "	6-12"	0.78

All other samples were below the analytical detection limit of 0.30 ppb. The laboratory transmittal report is included as attachment C.

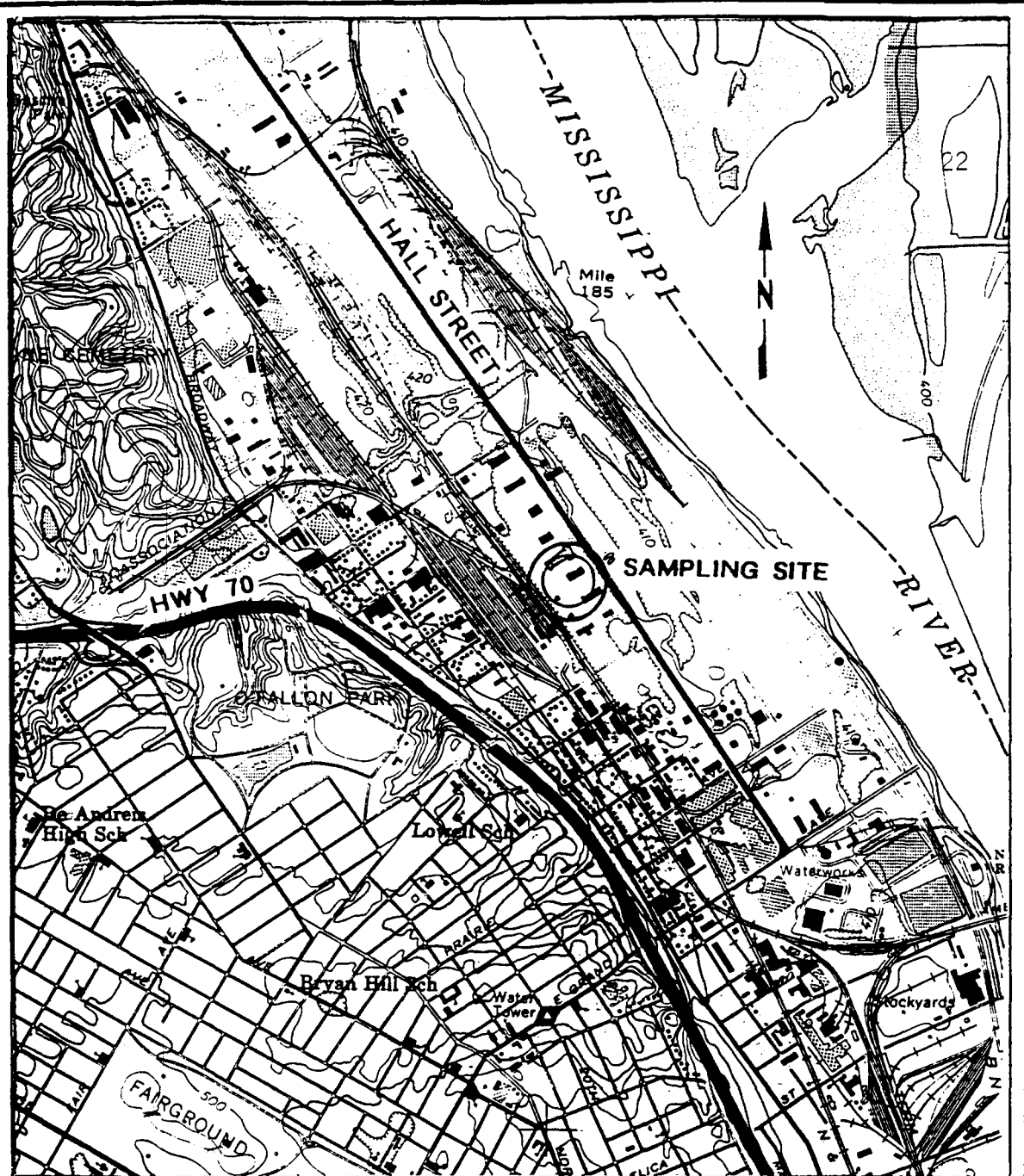
SUMMARY

The TAT was tasked by the U.S. EPA to assist in sampling activities at the Trans-Con Trucking Terminal site at 5701 Hall Street, St. Louis, Missouri, to determine the presence of dioxin in on-site soils. Seventy-four soil core samples were collected from 34 bore holes on June 1, 1994, and submitted for dioxin analysis. Analytical results indicated detectable levels of dioxin in 13 of the 74 samples. Six of the samples had concentrations of dioxin between 1.08 and 15.00 ppb. A letter report was prepared upon receipt of the validated analytical results.

ATTACHMENTS:

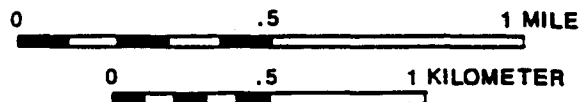
- A. SITE LOCATOR MAP
- B. SITE SKETCH MAP
- C. ANALYTICAL RESULTS

ATTACHMENT A



TRANS-CON TRUCKING TERMINAL

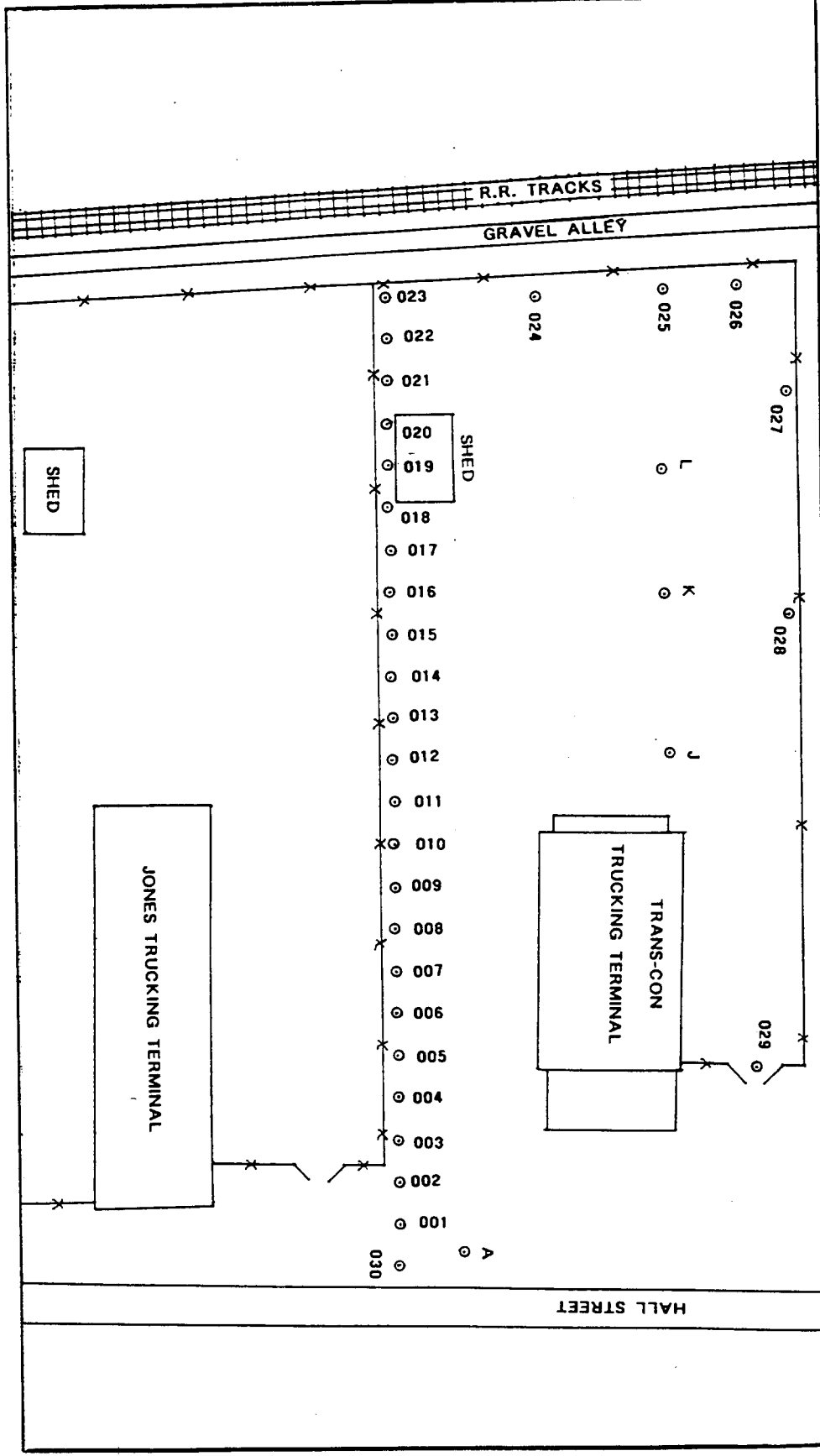
SCALE 1:24000



TDD: T07-9405-0024

PAN: EMO0478SAA

ATTACHMENT B



TDD: T07-9405-0024
PAN: EMO0478SAA

NOT TO SCALE

ATTACHMENT C

CRANDUM

SUBJECT: TRANSMITTAL REPORT FOR CASE 20088 BATCH A

FROM: ANDREA JIRKA
CHIEF, LABO/ENSV

TO: CHIEF, EPA/ENSV

RE: DIXON, 2378-TETRACHLORODIBENZO-P-(TCDD)
REPORTED ON A WET WEIGHT BASIS

END NUMBER	EPA SAMPLE NUMBER	SAMPLE DESCRIPTION	SITE SECTION LAYER	LAB	ANALYSIS DATE	CONCENTRATION	D I D UNITS	V E
205016	94-YT192-242	POINT 19, 12"	-	-	ATS 06/06/94	0.323	U	NG/GM V
205017	94-YT192-241	POINT 22, 6"	-	-	ATS 06/06/94	0.300	U	NG/GM V
205018	94-YT192-242	POINT 22, 12"	-	-	ATS 06/06/94	0.302	U	NG/GM V
205019	94-YT192-243	POINT 21, 6"	-	-	ATS 06/06/94	0.302	U	NG/GM V
205020	94-YT192-244	POINT 21, 12"	-	-	ATS 06/06/94	0.300	U	NG/GM V
205021	94-YT192-245	POINT 22, 6"	-	-	ATS 06/06/94	0.302	U	NG/GM V
205022	94-YT192-246	POINT 22, 12"	-	-	ATS 06/06/94	0.302	U	NG/GM V
205023	94-YT192-247	POINT 23, 6"	-	-	ATS 06/06/94	0.303	U	NG/GM V
205024	94-YT192-248	POINT 23, 12"	-	-	ATS 06/06/94	0.300	U	NG/GM V
205025	94-YT192-249	POINT 23, 18"	-	-	ATS 06/06/94	0.300	U	NG/GM V
205026	94-YT192-250	POINT 23, 24"	-	-	ATS 06/06/94	0.300	U	NG/GM V
205027	94-YT192-251	POINT 24, 6"	-	-	ATS 06/06/94	0.300	U	NG/GM V
205028	94-YT192-252	POINT 24, 12"	-	-	ATS 06/06/94	0.302	U	NG/GM V
205029	94-YT192-253	POINT 25, 6"	-	-	ATS 06/06/94	0.294		NG/GM V
205030	94-YT192-254	POINT 25, 12"	-	-	ATS 06/06/94	0.23		NG/GM V
205031	94-YT192-255	POINT 26, 6"	-	-	ATS 06/06/94	1.08		NG/GM V
205032	94-YT192-256	POINT 26, 12"	-	-	ATS 06/06/94	0.300	U	NG/GM V
205033	94-YT192-257	POINT 27, 6"	-	-	ATS 06/06/94	0.300	U	NG/GM V
205034	94-YT192-258	POINT 27, 12"	-	-	ATS 06/06/94	0.300	U	NG/GM V
205035	94-YT192-259	POINT 28, 6"	-	-	ATS 06/06/94	0.300	U	NG/GM V
205036	94-YT192-260	POINT 28, 12"	-	-	ATS 06/06/94	0.300	U	NG/GM V
205037	94-YT192-261	POINT 27, 6"	-	-	ATS 06/06/94	0.300	U	NG/GM V
205038	94-YT192-262	POINT 29, 12"	-	-	ATS 06/06/94	0.302	U	NG/GM V
205039	94-YT192-263	POINT 29, 18"	-	-	ATS 06/07/94	0.300	U	NG/GM V
205040	94-YT192-264	POINT 29, 24"	-	-	ATS 06/07/94	0.300	U	NG/GM V
205041	94-YT192-265	POINT 30, 6"	-	-	ATS 06/06/94	15.0		NG/GM V
205042	94-YT192-266	POINT 30, 12"	-	-	ATS 06/06/94	0.466		NG/GM V
205043	94-YT192-267	POINT A, 6"	-	-	ATS 06/06/94	1.29		NG/GM V
205044	94-YT192-268	POINT A, 12"	-	-	ATS 06/07/94	0.777		NG/GM V
205045	94-YT192-269	POINT J, 6"	-	-	ATS 06/07/94	0.300	U	NG/GM V
205046	94-YT192-272	POINT J, 12"	-	-	ATS 06/06/94	0.302	U	NG/GM V

DATE: 06/04/94

CASE NO: 00000 BATCH: A

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MEMORANDUM

SUBJECT: TRANSMITTAL REPORT FOR CASE 00000 BATCH A

FROM: AMBERA JIRKA
CHIEF, LABO/ENSV

TO: CHIEF, EFAP/ENSV

6002: DIOXIN, 2,3,7,8-TETRACHLORODIBENZO-P-(TCDD)
REPORTED ON A WET WEIGHT BASIS

SND NUMBER	EPA SAMPLE NUMBER	SAMPLE DESCRIPTION	SITE		ANALYSIS		D		V	
			SECTION	LAYER	LAB	DATE	CONCENTRATION	D	UNITS	C
005047	94-YT192-071	POINT K, 4"	-	-	ATS	06/04/94	0.100	U	NG/GM	V
005048	94-YT192-072	POINT K, 10"	-	-	ATS	06/04/94	0.100	U	NG/GM	V
005049	94-YT192-073	POINT L, 4"	-	-	ATS	06/04/94	0.100	U	NG/GM	V
005050	94-YT192-074	POINT L, 10"	-	-	ATS	06/04/94	0.100	U	NG/GM	V

DATE: 06/07/94

CASE NO: 22200 BATCH: A

PAGE 1

MEMORANDUM

SUBJECT: TRANSMITTAL REPORT FOR CASE 22200 BATCH A

FROM: ANDREA JIRKA
CHIEF, LABO/ENSV

TO: CHIEF, EPLR/ENSV

SD32: DIOXIN, 2378-TETRACHLORODIBENZO-P-(TCDD)
REPORTED ON A WET WEIGHT BASIS

SMD NUMBER	EPA SAMPLE NUMBER	SAMPLE DESCRIPTION	SITE SECTION LAYER	LAB	ANALYSIS DATE	CONCENTRATION	D I D	U NITS	V C
140001	94-YT190-001	POINT 1, 6"	-	-	ATS 06/03/94	0.367		NG/GM	V
140002	94-YT190-002	POINT 1, 12"	-	-	ATS 06/03/94	0.300	U	NG/GM	V
140003	94-YT190-003	POINT 2, 6"	-	-	ATS 06/03/94	0.300	U	NG/GM	V
140004	94-YT190-004	POINT 2, 12"	-	-	ATS 06/03/94	0.300	U	NG/GM	V
140005	94-YT190-005	POINT 3, 6"	-	-	ATS 06/03/94	0.684		NG/GM	V
140006	94-YT190-006	POINT 3, 12"	-	-	ATS 06/03/94	0.300	U	NG/GM	V
140007	94-YT190-007	POINT 4, 6"	-	-	ATS 06/03/94	0.300	U	NG/GM	V
140008	94-YT190-008	POINT 4, 12"	-	-	ATS 06/03/94	0.300	U	NG/GM	V
140009	94-YT190-009	POINT 5, 6"	-	-	ATS 06/03/94	1.33		NG/GM	V
140010	94-YT190-010	POINT 5, 12"	-	-	ATS 06/03/94	0.300	U	NG/GM	V
140011	94-YT190-011	POINT 6, 6"	-	-	ATS 06/03/94	0.300	U	NG/GM	V
140012	94-YT190-012	POINT 6, 12"	-	-	ATS 06/03/94	0.300	U	NG/GM	V
140013	94-YT190-013	POINT 7, 6"	-	-	ATS 06/03/94	0.455		NG/GM	V
140014	94-YT190-014	POINT 7, 12"	-	-	ATS 06/03/94	0.300	U	NG/GM	V
140015	94-YT190-015	POINT 8, 6"	-	-	ATS 06/03/94	0.300	U	NG/GM	V
140016	94-YT190-016	POINT 8, 12"	-	-	ATS 06/03/94	0.300	U	NG/GM	V
140017	94-YT190-017	POINT 9, 6"	-	-	ATS 06/03/94	0.334		NG/GM	V
140018	94-YT190-018	POINT 9, 12"	-	-	ATS 06/03/94	0.300	U	NG/GM	V
140019	94-YT190-019	POINT 10, 6"	-	-	ATS 06/03/94	0.300	U	NG/GM	V
140020	94-YT190-020	POINT 10, 12"	-	-	ATS 06/03/94	1.35		NG/GM	V
140021	94-YT190-021	POINT 10, 18"	-	-	ATS 06/03/94	0.300	U	NG/GM	V
140022	94-YT190-022	POINT 10, 24"	-	-	ATS 06/03/94	0.300	U	NG/GM	V
145023	94-YT190-023	POINT 11, 6"	-	-	ATS 06/03/94	0.300	U	NG/GM	V
145024	94-YT190-024	POINT 11, 12"	-	-	ATS 06/03/94	0.300	U	NG/GM	V
205000	94-YT190-025	POINT 12, 6"	-	-	ATS 06/03/94	0.300	U	NG/GM	V
205001	94-YT190-026	POINT 12, 12"	-	-	ATS 06/03/94	0.300	U	NG/GM	V
205002	94-YT190-027	POINT 13, 6"	-	-	ATS 06/03/94	0.300	U	NG/GM	V
205003	94-YT190-028	POINT 13, 12"	-	-	ATS 06/03/94	0.300	U	NG/GM	V
205004	94-YT190-029	POINT 14, 6"	-	-	ATS 06/03/94	0.300	U	NG/GM	V
205005	94-YT190-030	POINT 14, 12"	-	-	ATS 06/03/94	0.300	U	NG/GM	V
205006	94-YT190-031	POINT 15, 6"	-	-	ATS 06/03/94	0.300	U	NG/GM	V

DUM

SUBJECT: TRANSMITTAL REPORT FOR CASE 22280 BATCH A

FROM: ANDREA JIRKA
CHIEF, LABQ/ENSV

TO: CHIEF, EP&R/ENSV

0002: DIOXIN, 2378-TETRACHLORODIBENZO-P-(TCDD)
REPORTED ON A WET WEIGHT BASIS

SMD NUMBER	EPA SAMPLE NUMBER	SAMPLE DESCRIPTION	SITE SECTION LAYER	LAB	ANALYSIS DATE	CONCENTRATION	D I D	U NITS	V C
205007	94-YT190-032	POINT 15, 12"	-	-	ATS 06/03/94	0.300	U	NR/GM	U
205008	94-YT190-033	POINT 16, 6"	-	-	ATS 06/03/94	0.300	U	NR/GM	U
205009	94-YT190-034	POINT 16, 12"	-	-	ATS 06/03/94	0.300	U	NR/GM	U
205010	94-YT190-035	POINT 17, 6"	-	-	ATS 06/03/94	0.300	U	NR/GM	U
205011	94-YT190-036	POINT 17, 12"	-	-	ATS 06/06/94	0.300	U	NR/GM	U
205012	94-YT190-037	POINT 18, 6"	-	-	ATS 06/03/94	0.300	U	NR/GM	U
205013	94-YT190-038	POINT 18, 12"	-	-	ATS 06/03/94	0.300	U	NR/GM	U
205014	94-YT190-039	POINT 19, 6"	-	-	ATS 06/03/94	0.300	U	NR/GM	U
205015	94-YT190-900P	PE AUDIT	-	-	ATS 06/03/94	2.98		NR/GM	U
205015	94-YT190-900T	TRUE VALUE PE	-	-	ATS 06/03/94	2.97		NR/GM	U

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HALL STREET

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TRANS CON SAMPLE
LOCATIONS.

